

ENGINEERING CHANGE NOTICE

DART AEROSPACE LTD		ECN #: 702			
Date: 05.06.10		Created By: [Signature]	Checked By: [Signature]		
Project No: D212-664		Approved By: [Signature]	Approved By: [Signature]		
Project Name: CROSSTUBE INSTALLATION		(Proj. Manager)	(Management if reqd) N/A		
Description of Change: RELEASE : TC STC SH01-9 ISSUE 3 ICA-D212-664- Rev. 2 IIN-D212-664 Rev. C FMS-D214-664 Rev. A D3428 Rev. A D212-664-141 Rev. B D212-664-241 Rev. B D412-664-243 Rev. B					
Notification/Acceptance	Affected	Initials	Authorization		
QA	<input checked="" type="checkbox"/>		P601-581		
Production	<input checked="" type="checkbox"/>				
Planning	<input checked="" type="checkbox"/>				
Marketing	<input checked="" type="checkbox"/>				
Engineering Actions	Yes	No	Responsible	To happen by:	Complete
Update Blue/Pink File	<input checked="" type="checkbox"/>		KS/PH	05.06.14	05.06.13 [Signature] PH
Update DSI File		<input checked="" type="checkbox"/>			
Update D-Part Master Binder	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.10 [Signature] PH
Update Grey Project Binder	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 [Signature] PH 05.06.23 [Signature]
Update DEO Binder		<input checked="" type="checkbox"/>			
Update Master Document List		<input checked="" type="checkbox"/>			
Update Drawing Approval Record	<input checked="" type="checkbox"/>		PH/DS	05.06.14	05.06.13 PH
Update Change Record Form	<input checked="" type="checkbox"/>		KJ/PH	05.06.14	05.06.13 PH
Move Electronic File	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 PH
Notify TCA of Change	<input checked="" type="checkbox"/>		DS	ASAP	05.06.08 [Signature]
Notify FAA of Change		<input checked="" type="checkbox"/>			
Update QSI 021	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	KJ	05.06.14	05.06.13 [Signature]
Update QSI 036		<input checked="" type="checkbox"/>			
Scan Documents	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 [Signature]
Update MIS Database	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 [Signature]
Update Access Database	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 [Signature]
Verification ARC	<input checked="" type="checkbox"/>		KJ/PH	05.06.14	05.06.13 [Signature] PH
Create/Update STC Approval List	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 [Signature]
Create/Update IPP's	<input checked="" type="checkbox"/>		JLM	05.06.14	05.06.22 [Signature]
Create/Update BOM's	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.22 [Signature]
Create/Update PPP's	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.09 [Signature]
Update Paperwork Kits in Production	<input checked="" type="checkbox"/>		KJ/PH	05.06.14	05.06.26 [Signature]
Update Paperwork Kits in Stock	<input checked="" type="checkbox"/>		LL/KJ/PH	05.06.14	05.06.24 [Signature] U
Rework/Scrap Current Production	<input checked="" type="checkbox"/>		PH/LL	05.06.28	? See Attached
Rework/Scrap Kits in Stock?	<input checked="" type="checkbox"/>		PH/LL	05.06.28	
Create/Update Laminated Dwgs	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.14 [Signature]
Create/Update Controlled Dwgs	<input checked="" type="checkbox"/>		KJ	05.06.14	05.06.13 [Signature]
Create/Update FAI sheets		<input checked="" type="checkbox"/>			
Create/Update CNC Programs		<input checked="" type="checkbox"/>			
Create/Update Tooling	<input checked="" type="checkbox"/>		JLM	05.08.08	05.08.08 [Signature]
Create/Update DXF File		<input checked="" type="checkbox"/>			
MPP required?		<input checked="" type="checkbox"/>			
Notify Previous Customers		<input checked="" type="checkbox"/>			
Notify Eurocopter France		<input checked="" type="checkbox"/>			
Notes: SEE ATTACHED NOTES.					

ACTIVITY SUMMARY REPORT



DART AEROSPACE LTD
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7

Attendees:

NOTES PREPARED BY:
DAN SHEPHERD.

Report Type:

Subject:

ECN 702

Venue:

Date:

05.06.13

Sheet

1 of 1

Item	Action / Description	Responsible	Due Date	Action / Date
1	REWORK DRILL TG FOR D212-664-101/-201 + D412-664-203 CROSSTUBES TO ACCOMMODATE EXTRA HOLES.	JLM	ASAP	
2.	ADD EXTRA HOLES + HARDWARE + NEW PAPERWORK TO ALL D212-664-101/-201 + D412-664-203 IN STOCK AND IN PROGRESS. UPDATE ALL LABELS TO REFLECT NEW CHANGE NUMBERS.(CREATE CUSTOM W/O)	LL/ DH	ASAP	B23644 ADDS New paperwork + Hardware w 05/06/28
3.	NEW CHANGE NUMBERS: D212-664-101 → CHG 002 D212-664-201 → CHG 002 D412-664-203 → CHG 003.	FYI	ASAP	PPP's done 05.09.09.
4	UPDATE IPP + BOM FOR D212-664-101/-201 + D412-664-203 TO REFLECT NEW HARDWARE + NEW CHG NUMBERS.	JLM/KJ	ASAP.	05.06.22
5	MAKE SOME D3428-1 PLACARDS TO GO WITH KITS IN STOCK + IN PROGRESS.	LL	ASAP.	
6.	CREATE APPLICATION FOR FINA VALIDATION OF REISED CANADIAN STZ.	KJ	ASAP.	05.06.15 PJ.

Kim Johnston

From: "David Shepherd" <davids@dartaero.com>
To: "Bill Beckett" <billb@dartaero.com>
Cc: "Kim Johnston" <kimj@dartaero.com>; "Jean-Luc Menard" <jeanlucm@dartaero.com>; "Linda Lacelle" <lindal@dartaero.com>; "Peggy McDonald" <peggym@dartaero.com>; "Peter Hum" <peterh@dartaero.com>
Sent: Tuesday, June 21, 2005 12:03 AM
Subject: Dart crosstubes compatible with Bell skidtubes

Bill,

Further to our discussion last night, I just wanted to make sure that if we are not going to start drilling the extra 4 holes in the medium Bell crosstubes right away, we still need to update the IPP and BOM right away to add the extra bolts to the kits. The contents of the DSI (instructions for drilling the extra holes) are in the new IIN, but without the extra bolts, the customer is still screwed if he is installing his crosstubes with Bell skidtubes. If the extra holes are not going in, the CHG number cannot change. The CHG number is important because it is used to distinguish crosstubes without extra holes from crosstubes with extra holes in the Installation Instructions.

I do not want that DSI being used anymore. It was a temporary measure for some UH-1 customers who couldn't wait. I didn't approve it as a delegate (no stamp) and it is therefore not suitable for the civilian market.

It is essential that this transition is co-ordinated with Kim. It was my understanding that we were going to do this change right away and retrofit the stock right away. PPP's may have already been changed and the new change number may be on the IPP.

The 212 fwd and aft crosstubes in progress should get the new IPP with the extra hardware as well as the latest paperwork even if the extra holes aren't being added.

The 2 x 412 aft crosstubes in stock should at least get the latest paperwork and the extra hardware even if they are not getting the extra holes. Don't change the CHG number if the extra holes aren't being added.

With respect to the extra holes in the existing drill jigs (I assume this is how you are going to do it although there are some complications because the extra bushings will be flush against the table ... may have to move crosstube off table, insert bushings, pin jig using existing forward-aft holes, and then drill extra holes), I am not sure if we have any of those special drill jig bushings and liners in stock (I believe we need 8 x 0.386, but someone should double check). We may have to order them and I believe they have been a special order in the past. If we are ordering them, we should look at ordering the bushings we need for 206 at the same time (I believe we need 32 x 0.323, but someone should double check).

I also recommend that we use scrap ends off Dart crosstubes in Engineering lab to do a fit test (drill scrap cuff and do test fit with Bell saddles) before we start drilling money holes in NEW crosstubes.

Hope this helps.

David

6/27/2005

Finished Inventory Log

Part Number: D212-664-201

Description: Crosstube Installation

[illegible]

Part Number: 0412-664-203

Description: Crosstube Assembly High Aft

[illegible]

DART AEROSPACE LTD		Work Order:	23644
Description:		Part Number:	D412664-203
Dwg:		Qty:	1
Page 1 of 1			

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller	A	05.06.22	1
	Stores	add to kit: pro ECU 702 new paperwork 2x AN6-41A M17231 10x AN960JD616 M17231 2x MS21042 L6 M15194	CL	05.06.22	1
3	QC	Inspect kit 100% for completeness	CL	05.06.22	1
4	PL	Add to box	CL	05.06.22	1
5	AC	Close w/o Cost/part 2073.18 Cost w/o 2073.18	AR	05.06.26	1
6	QC	Inspect Level 21	AR	05.06.28	1

Rev	Date	Change	Revised By	Approved
A		New issue		

ENGINEERING CHANGE NOTICE

MPP

ECN #:

702

DART AEROSPACE LTD		Date: 05.06.10		Created By: <i>[Signature]</i>		Checked By: <i>[Signature]</i>	
Project No: D212-664		Project Name: CROSSSTUBE INSTALLATION		Approved By: <i>[Signature]</i>		(Management if reqd)	
Description of Change:							
RELEASE : TC STC SH01-9 Issue 3				D3428 Rev. A			
ICA-D212-664- Rev. 2				D212-664-141 Rev. B			
IIN-D212-664 Rev. C				D212-664-241 Rev. B			
FM3-D214-664 Rev. A				D412-664-243 Rev. B			
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Update Paperwork Kits in Production	<input checked="" type="checkbox"/>		KS/PH	05.06.14			
Update Paperwork Kits in Stock	<input checked="" type="checkbox"/>		KS/PH	05.06.14			
Rework/Scrap Current Production	<input checked="" type="checkbox"/>		PH/L		4 05.08.12 new prod.		
Rework/Scrap Kits in Stock?	<input checked="" type="checkbox"/>		PH/L				
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Notes:							
SEE ATTACHED NOTES.							

DART AEROSPACE LTD		Work Order:	23645 B
Description: Custom W/O to update paperwork & Add hardware		Part Number:	D212-664-201 D412-664-203
Dwg: N/A			
Ref: N/A		Page 1 of 1	

Step	Location	Procedure	By	Date																								
1	DC	Issue Traveler	[Signature]	05.06.22																								
2	ST	Remove from finished inventory <table border="1"> <thead> <tr> <th>Qty</th> <th>Part Number</th> <th>Description</th> <th>Batch</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>D212-664-201</td> <td>HIGH APT XTUBE</td> <td>22831</td> </tr> <tr> <td>1</td> <td>D412-664-203</td> <td>HIGH APT XTUBE</td> <td>19205</td> </tr> </tbody> </table>	Qty	Part Number	Description	Batch	1	D212-664-201	HIGH APT XTUBE	22831	1	D412-664-203	HIGH APT XTUBE	19205	[Signature]	N/A												
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3	KP	Add new hardware and paperwork to D212-664-201 Pick: <table border="1"> <thead> <tr> <th>Qty</th> <th>Part Number</th> <th>Description</th> <th>Batch</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>AN6-41A</td> <td>Bolt</td> <td>M17231</td> </tr> <tr> <td>10</td> <td>AN960JD616</td> <td>Washer</td> <td>M17231</td> </tr> <tr> <td>2</td> <td>MS2142L6</td> <td>Nut (or -6)</td> <td>M15194</td> </tr> <tr> <td>1</td> <td>D3428-1</td> <td>Placard</td> <td>023667</td> </tr> <tr> <td>1</td> <td colspan="3">new paperwork</td> </tr> </tbody> </table>	Qty	Part Number	Description	Batch	2	AN6-41A	Bolt	M17231	10	AN960JD616	Washer	M17231	2	MS2142L6	Nut (or -6)	M15194	1	D3428-1	Placard	023667	1	new paperwork			[Signature]	05.06.24
Qty	Part Number	Description	Batch																									
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10	AN960JD616	Washer																										
2	MS2142L6	Nut (or -6)																										
1	new paperwork																											
5	QC5	Inspect work to Step 4	[Signature]	05.07.04																								
6	PK	Ensure paperwork and P/N's match with boxes.	[Signature]	05.07.04																								
7	ST	Return to finished inventory	[Signature]	05.07.04																								
8	AC	Cost / part: 18.92	[Signature]	05.07.06																								
9	DC	Close W/O Inspect Level 21	[Signature]	05.07.15																								
10																												

(Note: Attach a copy of Custom W/O to each of the W/O's listed in Step 2 above)

Rev	Date	Change	Revised By	Approved
A	05.06.22	New Issue	KJ/JLM	[Signature]